Aerial Detection Survey, Pacific Southwest Region
Southern California, July 2018

Objective: The objective of this survey is to detect and record recently killed and damaged trees. Most of the mortality and damage is caused by insects and diseases.

Surveyors: J. Moore, L. McAfee, J. Pope

Methodology: Recent tree mortality is mapped using Digital Mobile Sketch Mapping systems. Surveyors draw polygons or affix points and annotate percent of forested area affected along with damage type, tree species, and causal agent. The five-class rating system is: Very Light (1-3%), Light (4 -10%), Moderate (11-30%), Severe (31-50%), and Very Severe (>50%).

Survey Highlights:

This report is of preliminary findings in and around the San Bernardino, Angeles, and Cleveland National Forests. Recent tree mortality is mostly comprised of Jeffrey/ponderosa pine, white fir, and mixed oak.

- Jeffrey, Coulter, and ponderosa pine mortality is lumped in our preliminary findings. Mortality was detected on 5,900 acres and was primarily concentrated around the northern boundary of the San Gorgonio Wilderness in the San Bernardino NF at light to moderate intensities.
- Fir mortality was detected on 4,600 acres. White fir mortality was scattered throughout it's range, mostly light to moderate intensity.
- Oak mortality occurred across 3,900 acres. Mortality was mostly concentrated near the southern end of Lake Henshaw, and around the Cleveland National Forest.

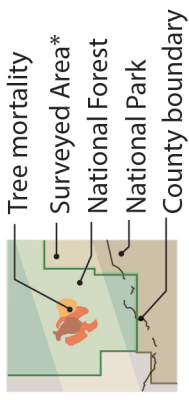| Host	Acres with Mortality
Jeffrey, Coulter, and Ponderosa Pine	5,900
White Fir	4,600
Mixed Oak Mortality	3,900
Pinyon Mortality	150
Unknown hardwoods	11
Total Acres	14,561

Oak mortality, likely caused by goldspotted oak borer, south of Hot Springs Mountain in the Los Coyotes Reservation.

Oak mortality south of Aguanga Mountain on the Cleveland NF. Notice the prevalence of older oak mortality as well.

FOREST SERVICE

Please direct questions pertaining to this report to Jeffrey Moore
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USDA

UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST HEALTH PROTECTION
AERIAL DETECTION MONITORING

2018 SURVEY
SOUTHERN CALIFORNIA

Tree mortality
Surveyed Area*
National Forest
National Park
County boundary

* This map depicts tree mortality only within the surveyed area.

Percent Trees Affected

Very Light (1-3%)
Light (4-10%)
Moderate (11-29%)
Severe (30-50%)
Very Severe (>50%)

Map only depicts dead trees surveyed in 2018.
Areas of tree mortality are for visualization purposes only.

JOSHUA TREE

Palm Springs

SAN BERNARDINO

SAN BERNARDINO

CLEVELAND

CLEVELAND

San Bernardino

Riverside

CLEVELAND

ANGELES

Arcadia

LOS ANGELES

SAN DIEGO

50 Miles

50 Kilometers

0

0

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